



September 12, 2012

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Mr. Conroy,

MSW Power formally requests determination as to regulatory applicability for the operation of the GEM Waste-To-Energy system at the Plymouth County Correctional Facility at 24 Long Pond Rd. in Plymouth Massachusetts. The system has been designed and built to convert three tons of waste into usable energy for the facility in a 24 hour period of time via a gasification reactor. The synthetic gas generated will be combusted in a separate burner/boiler system to harvest heat and offset natural gas consumed by the facility. Operational descriptions of both the GEM Waste-To-Energy system and the facility are included to aid in the determination.

The GEM waste-to-energy conversion system was previously installed in Waltham Massachusetts. The system located at the Plymouth County Correctional Facility was finished being built in June of 2011 at the Waltham location before being relocated to Plymouth June 1<sup>st</sup> 2012. A previous system was constructed in 2009 and tested under a Major Demonstration Project permitted by the MASS DEP issued January 2009.

MSW Power is seeking confirmation that the application described for the GEM waste-to-energy system is operation under the Other Solid Waste Incinerator Rule (OSWI Rule [40 CFR 60 Subpart EEEE]) as defined by Institutional Waste Incinerators. The jail is considered an institution and the institutional waste (as defined by 60.2977) will be used for energy recovery by the facility therefore the system is not covered by the definition of an Institutional Waste Incinerator.

MSW Power is also seeking confirmation that boiler operation using the syngas generated by the waste would *not* be covered by the Area Source Boiler Rule (40 CFR Part 63 Subpart JJJJJ).



The syngas is a gaseous fuel and the total yearly estimated potential emission rate for the facility based upon the AP-42 emission factors would classify the facility as an Area Source of Hazardous Air Pollutants not a Major Source. Potential yearly HAP emission estimates using the AP-42 emission factors are attached for the entire facility in question.

Regards,

Stephen Armstrong

Cc. Ian Cohen, Patrick Bird, Susan Lancey